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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/764,679	01/18/2001	Hideki Sato	1232-4673	6288
27123	7590	06/20/2005	EXAMINER	
MORGAN & FINNEGAN, L.L.P. 3 WORLD FINANCIAL CENTER NEW YORK, NY 10281-2101			ROBINSON, MARK A	
			ART UNIT	PAPER NUMBER
			2872	
DATE MAILED: 06/20/2005				

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/764,679

Applicant(s)

SATO ET AL.

Examiner

Mark A. Robinson

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 14 April 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 4,6,8-16 and 18-25 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 21-25 is/are allowed.
- 6) ☒ Claim(s) 4,8-16 and 18-20 is/are rejected.
- 7) ☒ Claim(s) 6 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### *Claim Objections*

1. Claims 4,6,8-16,20 and 25 are objected to because of the following informalities. Appropriate correction is required.

In claim 4 "said reflection type light modulating element" lacks antecedent basis.

In claim 6 "said light passing area" lacks antecedent basis.

In claims 20 and 25 it appears that "guiding" in line 2 is grammatically incorrect.

### *Claim Rejections - 35 USC § 102*

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 4,8,9,12-15 and 18-20 are rejected under 35 U.S.C. 102(b) as being anticipated by Bloom (US 5982553).

Bloom shows a projection apparatus including a light modulating element (reflective GLV 10), illuminating

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system(32R,G,B), and scanning optical system including a deflecting mirror(58) deflecting a beam from the modulating element, and a projection system (e.g. see fig. 6) projecting the beam from the deflecting mirror, wherein the illuminating system includes a lens system(50) of which the modulating element side is telecentric (note the paragraph bridging col. 8-9), with light from the modulating element propagating to the deflecting mirror through the telecentric lens system.

Regarding claim 8, note elongate light modulating areas(12) shown in figs. 2-3 and the anamorphic element(42), and regarding claim 9, that mirror(58) scans only in a direction orthogonal to the lengthwise direction of the light modulating area.

Regarding claims 12-15, note that the modulating element modulates in conformity with ON and OFF signals to produce a 2-D image (see the abstract).

Regarding claims 18-20, Bloom shows a scanning apparatus including reflective modulating element(10) and a scanning optical system(58,80) having a reflection area(58) which reflects and scans light emerged from the modulating element and a transmission area (D+1,D-1 shown in fig. 13) which transmits a second emerged light in a direction different from that of the first emerged light (i.e. the direction of light reflected from

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mirror 58 is different than that of light transmitted through reflector 80).

***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

5. Claims 10,11 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bloom (US 5982553).

Although not shown by Bloom, both 2-D modulating elements and 2-D scanning systems are very common in the art. It would have been obvious to the ordinarily skilled artisan at the time of invention to use either a 2-D modulating element or a 2-D scanner in Bloom's system in order to enable faster scanning/scanning along plural axes as is common in the art.

***Allowable Subject Matter***

6. Claims 21-25 are allowed.

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7. Claim 6 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

8. The following is a statement of reasons for the indication of allowable subject matter: the prior art does not teach or suggest the particular deflecting mirror which includes the light passing area *as set forth in the combination of claim 6*, or an image display apparatus which includes the scanning system having reflection and transmission areas, with the transmission area transmitting light emerged which is not the image light in a direction different from that of the image light, as set forth in the combination of claim 18. Note that the objections to the claims set forth above in section 1 must be overcome.

#### ***Response to Arguments***

9. Applicant's arguments with respect to the claims have been considered but are moot in view of the new ground(s) of rejection.

Regarding applicant's amendment of claim 4 and remarks directed thereto, it should be noted that this claim was amended to include the limitations of claim 7 and not claim 5 which was indicated to be allowable in the previous office action (claim 7

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was indicated as allowable based upon dependence on allowable claim 5). Thus, claim 4 as amended presents a new combination not previously considered by the examiner.

### ***Conclusion***

10. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mark Robinson whose telephone number is (571) 272-2319.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Drew Dunn, can be reached at (571) 272-2312. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

MR

6/16/05

  
MARK A. ROBINSON  
PRIMARY EXAMINER